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FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP  
1100 SUPERIOR AVENUE, SEVENTH FLOOR  
CLEVELAND, OH 44114

EXAMINER

DEXTER, CLARK F

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/780,323

Applicant(s)

SZYMANSKI, DAVID

Examiner

Clark F. Dexter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 11, 17, 21, 22, 25 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-16, 18-20, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/18/04; 7/24/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I (claims 1-10, 12-16, 18-20, 23 and 24) in the reply filed on July 17, 2006 is acknowledged. Claims 11, 17, 21, 22, 25 and 26 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

### ***Information Disclosure Statement***

2. The information disclosure statements filed on May 18, 2004 and July 24, 2006 have been received and the references listed thereon have been considered.

### ***Abstract***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it is too long. Appropriate correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 112***

5. Claims 2, 3, 16, 18 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 2, the recitation "variation in said angle" is vague and indefinite, particularly since it is not clear how a particular cutting link can have angle that varies with respect to itself.

In claim 3, line 2, the recitation "variation in said angle" is vague and indefinite, as described above.

In claim 16, line 5, the recitation "variation in said angle" is vague and indefinite, as described above.

In claim 18, line 6, the recitation "variation in said angle" is vague and indefinite, as described above.

In claim 20, line 2, the recitation "variation in said angle" is vague and indefinite, as described above.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Rejections Over Wright:

7. Claims 1-3 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright, pn 4,744,278.

Regarding claim 1, Wright discloses a device with every structural limitation of the claimed invention including:

a base member (e.g., 52) adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface having a first taper (e.g., the upper surface of 65 as viewed in Fig 7); and

a cutting member (e.g., 54) that comprises a cutting edge and releasably engages said base member, said cutting member including a surface having a second taper, wherein said first taper and said second taper extend at an angle ranging from about 0.5 to about 45 degrees relative to a direction of chain travel at a close tolerance effective to cause self-locking engagement of said first taper of said seat surface and said second taper of said cutting member surface;

[claim 2] wherein said close tolerance is characterized by variation in said angle being not more than about 10 degrees (as best understood);

[claim 3] wherein said close tolerance is characterized by variation in said angle being not more than 0.5 degrees (as best understood);

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[claim 12] wherein at least one of said cutting member and said base member comprises a water-resistant material applied by a process selected from the group consisting of steam treatment, resin infiltration, copper infiltration and loctite infiltration (e.g., the base material in Wright is disclosed as "investment case of hard, high strength steel" which is a water-resistant material, and because the product is disclosed, the process by which the product is made is not critical).

Rejections Over Raetz:

8. Claims 1-3 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Raetz, pn 3,547,167.

Regarding claim 1, Raetz discloses a device with every structural limitation of the claimed invention including:

a base member (e.g., 6, 7) adapted to be pivotally connected to other links of the saw chain, said base member comprising a seat surface (e.g., 7 including surfaces 18, 19; see also col. 3, lines 36-37) having a first taper; and

a cutting member (e.g., 9) that comprises a cutting edge and releasably engages said base member, said cutting member including a surface having a second taper, wherein said first taper and said second taper extend at an angle ranging from about 0.5 degrees to about 45 degrees relative to a direction of chain travel at a close tolerance effective to cause self-locking engagement of said first taper of said seat surface and said second taper of said cutting member surface;

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[claim 2] wherein said close tolerance is characterized by variation in said angle being not more than about 10 degrees (as best understood);

[claim 3] wherein said close tolerance is characterized by variation in said angle being not more than 0.5 degrees (as best understood);

Regarding claim 13, Raetz discloses a device with every structural limitation of the claimed invention including:

a plurality of the quick change cutting links of claim 1;

[claim 14] wherein said saw chain is adapted for use on a saw comprising a chain saw, a timber harvester, a buck saw and a saw for cutting wood pallets.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-10, 15, 16, 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over one of Wright, pn 4,744,278 or Raetz, pn 3,547,167 in view of .

Wright and Raetz, each taken separately, discloses almost every structural limitation of the claimed invention as described above, but each lacks the specific material designations for each of the base member and the cutter member, as follows:

Each lacks the device

[claim 4] wherein said cutting member comprises sintered and compacted particles of abrasion resistant material;

[claim 5] wherein said base member comprises stamped metal.

[claim 6] wherein said base member comprises sintered and compacted particles of abrasion resistant material;

[claim 7] wherein said abrasion resistant material comprises at least one of metal and ceramic;

[claim 8] wherein said abrasion resistant material comprises a carbide containing compound;

[claim 9] wherein said carbide containing compound comprises a compound selected from the group consisting of tungsten carbide, silicon carbide, tantalum carbide and aluminum carbide;

[claim 10] herein said abrasion resistant material comprises a tool steel alloy;

[claim 15] wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 16] wherein said cutting member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 18] wherein said base member consists essentially of sintered and compacted particles of abrasion resistant material;

[claim 19] said cutting member comprises sintered and compacted particles of abrasion resistant material.



Regarding claims 4, 6-10, 15, 16, 18 and 19, it is respectfully submitted that the use of such material on cutting teeth is old and well known in the art. For example, Funakubo discloses one example of a disclosure that discusses many of the claimed materials (e.g., see col. 1, the paragraph beginning at line 6) including the materials set forth in the subject claims, and teaches that these materials have been used for their known benefits including improved durability and strength characteristics. Therefore, it would have been obvious to one having ordinary skill in the art to use the subject materials to make the cutters of Wright or Raetz for the well known benefits including those described above.

Regarding claims 5 and 10, the Examiner takes Official notice that such materials are old and well known in the art and provide various well known benefits including superior strength and durability. Therefore, it would have been obvious to one having ordinary skill in the art to use the subject materials to make the cutters of Wright or Raetz for the well known benefits including those described above.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Clark F. Dexter**  
**Primary Examiner**  
**Art Unit 3724**

cf  
August 7, 2006